

# Preferred Resources In The Context of A Multi-Year Forward Resource Adequacy Requirement

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## Types of Forward Capacity



Local

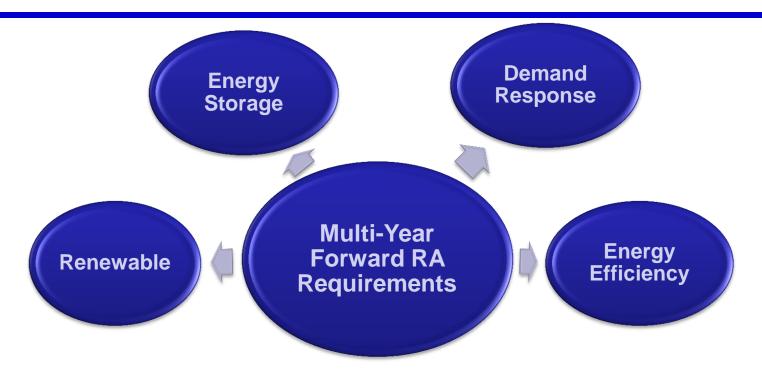
**Flexible** 

Which kinds of capacity should be subject to forward procurement requirements?

- For all types, key priority is to ensure that preferred resources are allowed to meet needs
  - ✓ On level playing field with other resources
  - ✓ Define characteristics not technologies
- > Too early to select types: Track 2 deficiencies not demonstrated yet



### Impact on Preferred Resources



Positive or negative impact on the development of preferred resources?

Depends on a number of factors

- Resource type: dispatchable or non-dispatchable
- The counterfactual: what LSEs would procure otherwise
- Policy design: focus on attributes or technologies

If done correctly, there is the potential for positive impact.



### Consistency With State Policies



What design elements ensure consistency with the loading order and other environmental goals?

#### Key elements:

- Subtract all i) reasonably expected to occur, ii) cost-effective iii) demand side, and iv) non-dispatchable resources from demand forecast first
- > Fill identified needs according to loading order and:
  - ✓ Defining needs in technology-neutral terms
  - Defining reasonable operational requirements



#### **Contact Info**

Thank you.

Questions?

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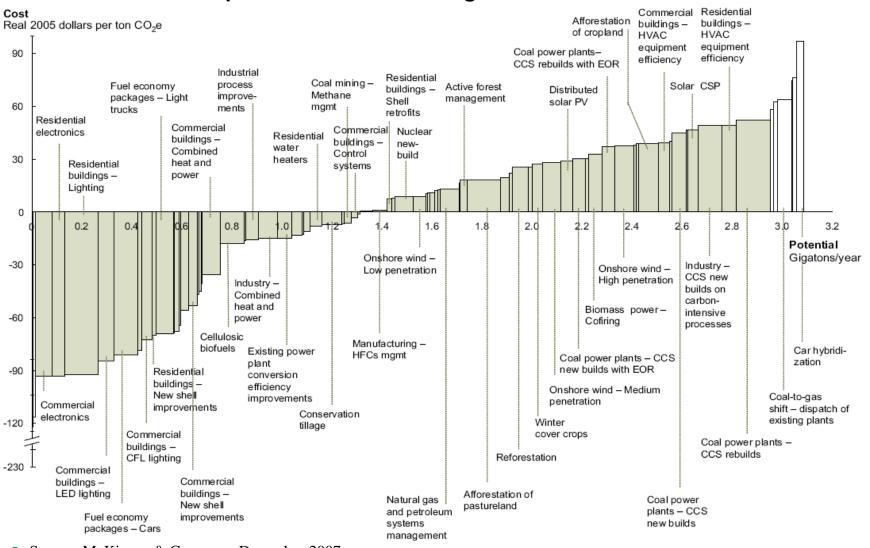






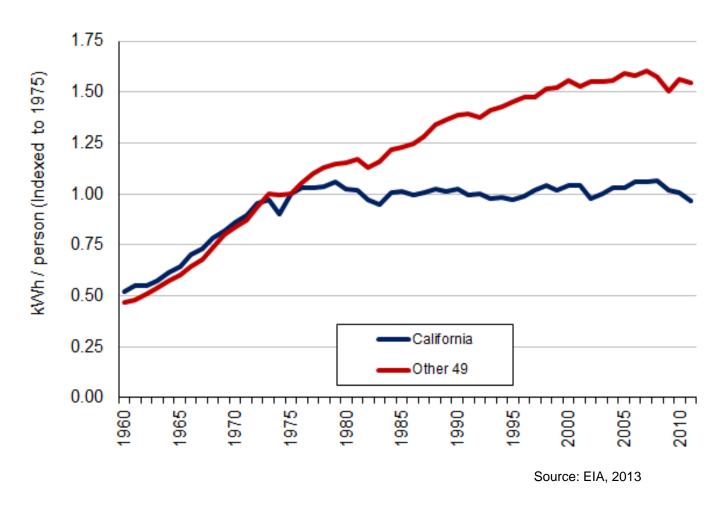
## Efficiency Is A Key Resource

#### 2030 U.S. abatement potential under mid-range commitment and action



Source: McKinsey & Company, December 2007

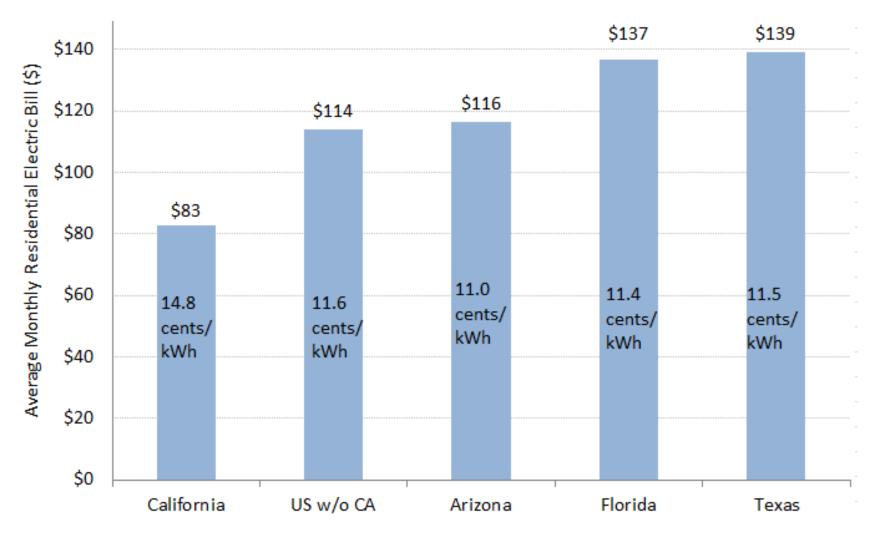
#### **Per Capita Electricity Consumption**



Industrial consumption only accounts for 20% of the difference between CA & US



## Measuring Financial Savings: Rates v. Bills





Source: US EIA, 2012

## Impacts on Actual Consumption

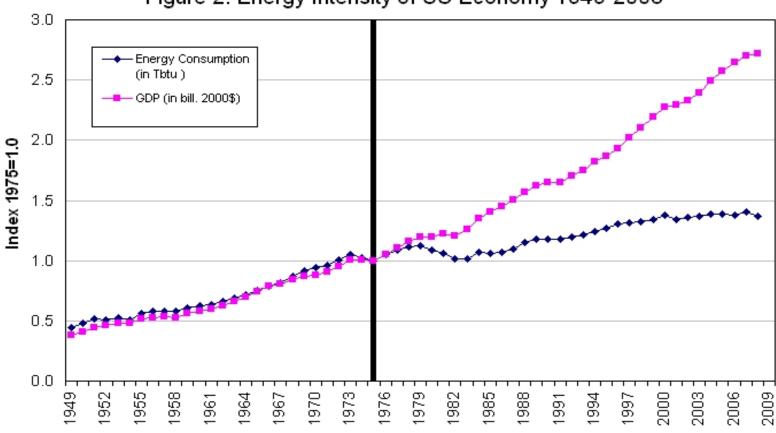
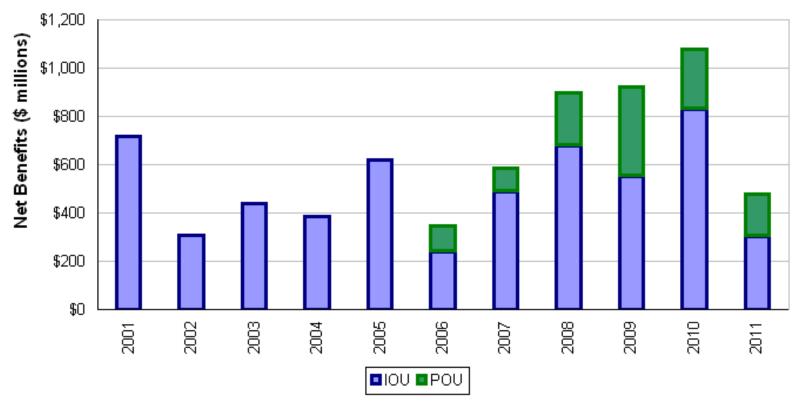


Figure 2: Energy Intensity of US Economy 1949-2008

- In post-World War II America, our energy consumption was increasing in lockstep with our production of wealth; but after deploying strong efficiency policies, that link was broken
- From 1949-1975, energy consumption increased by 125%; over the next 26 years, it slowed to 37%.
- Energy efficiency can reduce our energy consumption faster than our economy grows

#### **Measurement of Net Benefits from Programs**



Sources: CPUC Verification Reports, Incentive Decisions, AEAP Reports, SB 1037 Reports, incentive payments subtracted

- Net Benefits are financial benefits above and beyond the cost of the programs
- Programs provided customers nearly \$7 *billion* in net benefits over the last decade

